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09/686,572	10/10/2000	Thomas James Dubil	US000183	4775
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EXAMINER				
TRAN, MYLINH T				
ART UNIT		PAPER NUMBER		
2179				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

09/686,572

Applicant(s)

DUBIL ET AL.

Examiner

MYLINH TRAN

Art Unit

2179

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6, 14, 16-18, 21, 24-26 and 32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 4, 6, 14, 16, 17-18, 21, 24-26 and 32 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/01/2011 has been entered.

Claims 6, 14, 16, 17, 18 have been amended. However, the limitations of the claims have not been found to be patentable over prior art of record. Therefore, the claims are rejected under the same ground of rejection as set forth in the Office Action mailed 12/02/2010.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point

out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 6, 14, 16, 17, 18, 21, 24-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubischta et al. [US. 2002/0042915] in view of Shen et al. [US. 6,401,059].

As to claim 6, Kubischta et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"), the server on the internet including a database of control code sets (0027, "a database 109 containing schedule information for television programming may be stored within one or more of the headends 104, network centers 106, the Internet 108...The database 109 may include, for example, program channels, dates, times, critical reviews, content ratings, VCRPlus.RTM. codes, and the like"), each apparatus having a corresponding dedicated proprietary remote with a control panel (figure 2); further wherein each control code set in the database corresponds to a given dedicated proprietary remote control device (0027, "a database 109 containing schedule information for television programming may be stored

within one or more of the headends 104, network centers 106, the Internet 108...The database 109 may include, for example, program channels, dates, times, critical reviews, content ratings, VCRPlus.RTM. codes, and the like"); enabling the server on the internet to identify a control code set corresponding to each specified apparatus to be controlled and to provide the control code set as data in a mark-up language format (0073, "the online EPG 604 can be provided as a hypertext markup language (HTML) file"); providing each identified control code set over the internet to a home network, the mark-up language format control code set including a code set representative of commands to control a state of the specified apparatus (0024, "an STB 102 receives encoded television signals from the network 100 and decodes the same for display on the television. Additionally, an STB 102 receives commands from a user (via a remote control in one embodiment) and transmits such commands back to the network 100"); Kubischta et al. teach downloading the control code set in XML language into the remote control to control the specified apparatus (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,"); the IR/RF transmission (0032), using the soft keys of the displayed control panel on the touch screen GUI of the universal programmable remote control

device to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission (0032)

Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated proprietary remote of the specified apparatus to be controlled, wherein the graphical representation comprising including buttons (figure 2);

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus and the control panel hard keys (figure 2), Kubischta et al. do not teach or suggest a display screen including icons and soft keys corresponding to an image of actual control panel keys of the respective dedicated proprietary remote control device of the specified apparatus to be control to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40); corresponding to an image of actual control panel keys of the respective dedicated proprietary remote control device of the specified apparatus to be control to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device (figure 3 shows image of keys of the respective dedicated proprietary remote control device).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not teach the control code set not being usable by the universal programmable remote control device or by the specified apparatus to be controlled until the control code set is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus to be controlled is not pre-configured to deliver or cause delivery of its respective control code set to a control device; enable the universal remote to convert the control code set into the associated commands to control the specified apparatus;

However, Shen et al. show the control code set being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the control code set not being usable by the specified apparatus until the control code set is converted into the command

(column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)");

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 4, Kubischta et al. teach the control code set comprising part of an electronic program guide (EPG) (figure 2).

As to claim 14, Kubischta et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"), the server on the internet including a database of code sets (0027, "a database 109 containing schedule information for television programming may be stored within one or more of the headends

104, network centers 106, the Internet 108...The database 109 may include, for example, program channels, dates, times, critical reviews, content ratings, VCRPlus.RTM codes, and the like"), each apparatus having a corresponding dedicated remote with a control panel (figure 2); enabling the server on the internet to identify a control code set corresponding to each specified apparatus and to provide the control code set as data in a mark-up language format (figures (0073, "the online EPG 604 can be provided as a hypertext markup language (HTML) file")); Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons in which the buttons for selecting the commands for the selected apparatus are in the same locations as the corresponding buttons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607. That is, the intermediary unit 607 in the remote control 204 performs various operations on the retrieved HTML file having the online EPG 604 data, such as transcoding to provide the EPG 604 with control

functions. These control functions are added because without them, the online EPG 604 is a basic HTML file for viewing only. With transcoding, the HTML file is modified by the intermediary unit 607 such that control functions are added to allow the user to use the remote control's 204 buttons 232 or 234 to select channels from the displayed EPG 240 that was derived from the original online EPG 604, or to perform manipulation of the displayed EPG information (such as sorting, magnifying, organizing, and the like). Thus, the user can view the displayed EPG 240 on the remote control 204 without interrupting the television program that is being concurrently displayed on the television 202. If the user uses the buttons 232 or 234 to select a channel displayed by the EPG 240, then the transcoded file having control functionality can interpret this activity and identify the selected channel, and trigger transmission of a signal (to be received by the STB 102) to tune to this channel"; the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote (figure 2, 0089, "the present invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program

in the EPG 240");

Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel depicting an actual image of dedicated proprietary remote control device with the hard control keys of the dedicated proprietary remote control device of the dedicated remote of the specified apparatus including buttons (figure 2);

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys wherein the soft keys and the graphical representation of the icons on the touch screen GUI of the universal programmable remote control device such that the touch screen GUI of the universal programmable remote control device depicts the image of the actual control panel of the dedicated proprietary remote control device corresponding to the selected apparatus; However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40); wherein the soft keys and the graphical representation of the icons on the touch screen GUI of the universal programmable remote control device such that the touch screen GUI of the universal programmable remote control device depicts the image of the actual control panel of the dedicated proprietary remote control device corresponding to the selected apparatus (figure 3 shows image of keys of the respective dedicated proprietary remote control

device).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. teach downloading the control code set in XML language into the remote control to control the specified apparatus (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,"); the IR/RF transmission (0032), using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission (0032).

Kubischta et al. do not teach the control code set not being usable by the universal programmable remote control device or on the specified apparatus until the control code set is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code set to a control device; enable the universal remote

to convert the control code set into the associated commands to control the specified apparatus; using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission.

However, Shen et al. show the control code set being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus (figure 3) including icons and soft keys (column 2, line 40 through column 3, line 16) in which keys and icons for selecting the commands for the selected apparatus are in the same locations as the corresponding keys and icons of the dedicated remote (column 2, lines 40-65) such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote (figures 2-3, 0089, "the present invention provides the EPG 240 on the remote control

204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240"); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code set to a control device (column 2, lines 52-67); the control code set not being usable by the specified apparatus until the control code set is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)"; Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 16, Kubischta et al. teach a code set for controlling consumer electronics (CE) equipment and for being supplied as data in an extensible mark-up language (XML) format (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format");

and rendering a control key layout as a graphical representation image of buttons on a graphical user interface (GUI) of the universal programmable remote control device that emulates a key layout of a dedicated remote control device for the CE equipment (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607. That is, the intermediary unit 607 in the remote control 204 performs various operations on the retrieved HTML file having the online EPG 604 data, such as transcoding to provide the EPG 604 with control functions. These control functions are added because without them, the online EPG 604 is a basic HTML file for viewing only. With transcoding, the HTML file is modified by the intermediary unit 607 such that control functions are added to allow the user to use the remote control's 204 buttons 232 or 234 to select channels from the displayed EPG 240 that was derived from the original online EPG 604, or

to perform manipulation of the displayed EPG information (such as sorting, magnifying, organizing, and the like). Thus, the user can view the displayed EPG 240 on the remote control 204 without interrupting the television program that is being concurrently displayed on the television 202. If the user uses the buttons 232 or 234 to select a channel displayed by the EPG 240, then the transcoded file having control functionality can interpret this activity and identify the selected channel, and trigger transmission of a signal (to be received by the STB 102) to tune to this channel");

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus and the control panel hard keys (figure 2), Kubischta et al. do not teach or suggest a display screen including icons and soft keys; the CE equipment to be controlled is not preconfigured to deliver or cause delivery of its respective control code set to any control device, wherein the graphical representation comprises an image of icons and soft keys that corresponds to an image of actual control panel keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote control device corresponding to the CE equipment.

However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40); the CE equipment to be controlled is not preconfigured to deliver or cause delivery of its respective control code set to any control device, (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)"; wherein the graphical representation comprises an image of icons and soft keys that corresponds to an image of actual control panel keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote control device corresponding to the CE equipment (figure 3 shows image of keys of the respective dedicated proprietary remote control device).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not teach or suggest the control code set for being converted via an extensible stylesheet language (XSL) application into commands for installation and local processing on a universal programmable remote control device, the installed and locally processed commands representing an infra-red (IR) or radio-frequency (RF) signal for transmission by the universal programmable remote control device to the CE equipment. However, Shen et al. teach the limitation at column 2, lines 52-65.

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 17, Kubischta et al. teach enabling each of a plurality of users to specify to a server, over the bidirectional data network, a user specified apparatus for being controlled by a universal programmable remote

control device of a user (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"); enabling the server to identify extensible mark-up language (XML) tags that specify control code set included in data in XML language format (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format"; Kubischta et al. do not teach the control code set not being usable by the specified apparatus until the control code set is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code set to a control device; enable the universal remote to convert the control code set into the associated commands to control the specified apparatus;

However, Shen et al. show the control code set being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the control code set not being usable by the

specified apparatus until the control code set is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)";

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

While Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons (figure 2) and Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12,

lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

As to claim 18, Kubischta et al. providing control code set in an extensible mark-up language (XML) format (0073) to a home network including a universal programmable remote control device, the universal remote user interface being as front panel display for controlling the specified apparatus (0045, "the remote display device 220 may provide touch sensitivity"), While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, the control code set including a first set of control code set with rendering instructions for rendering a graphical representation image of buttons on a GUI touch screen (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607"); the graphical representation image on the GUI touch screen emulates a key layout of a dedicated remote control device for a consumer electronics (CE) equipment (figures 2-3, 0089, "the present

invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240") and the control panel hard keys (figure 2), Kubischta et al. do not teach or suggest a display screen including icons and soft keys neither the rendered graphical representation image of icons and soft keys corresponds to an image of actual control panel keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device, the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote device corresponding to the CE equipment.

However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40). the rendered graphical representation image of icons and soft keys corresponds to an image of actual control panel keys of the dedicated proprietary remote control device of the CE equipment to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device,

the touch screen GUI of the universal programmable remote control device depicting the image of the actual control panel of the dedicated proprietary remote device corresponding to the CE equipment (figure 3 shows image of keys of the respective dedicated proprietary remote control device).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not show a second set of control code set representing commands suitable for transmission by the control device over an IR or RF network to a CE equipment to control the state of the CE equipment, the control code set being provided from a database over a bidirectional data network to the home network, wherein the equipment is not preconfigured to deliver or cause delivery of its respective control code set to the control device.

However, Shen et al. show the control code set being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal

outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code set to a control device (column 2, lines 52-67); the control code set not being usable by the specified apparatus until the control code set is converted into the command, the control code set for being converted via an extensible mark-up language application into commands for installing and local processing on the universal programmable remote control device; an (extensible stylesheet language) XSL style sheet (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)";

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claims 21 and 26, Kubischta et al. teach the bidirectional data network including the internet and the source being located on the internet and remote from the selected apparatus and the bidirectional data network (0019).

As to claim 24, Shen et al. disclose the bidirectional data network including the internet, the plurality of home networks each being connected with the internet to receive control code set requested from the database over the internet; the user specifying the apparatus to be controlled over the internet to the server, which server is remote from and not a part of the home network or the specified apparatus, and the control code set being sent via the internet to the home network to the universal programmable remote control device (figures 1A-1B).

As to claim 25, Kubischta et al. disclose the database being remote from and not a part of the home network and not a part of the CE equipment (0027).

As to claim 32, Shen et al. teach rendering each icon or soft button in a same relative location as a corresponding control keys of the dedicated remote control device for the specified apparatus which perform the same function (column 2, line 40 through column 3, line 16). Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Kubischta et al. to include the feature of the touch screen GUI including icons and soft keys of

Shen to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Response to Arguments

Applicant has argued that Kubischta does not teach the feature of a touch screen GUI to display a graphical representation of the actual control panel hard keys of the dedicated proprietary remote control device of the specified apparatus to be controlled to thereby enable quick recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device. However, while Kubischta teaches a touch screen GUI (0045, "the remote display device may provide touch sensitivity) to display a graphical representation (the graphical representation of figure 2) of the actual control panel hard keys (0045, a user may press against a particular portion of the screen with a finger or other object, such as a stylus, to select "virtual" buttons or controls displayed upon the remote display device 220. If the remote display device 220 is configured as a touch screen, many, or possibly even all, of the buttons 232, 234 may not be needed) of the dedicated proprietary remote control device (figure 2, the remote display device 220) of the specified apparatus to be controlled, Shen teaches a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40) to thereby enable quick

recognition of the dedicated proprietary remote control device while manipulating the universal programmable remote control device (figure 3 shows image of keys of the respective dedicated proprietary remote control device).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4141.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached at 571-272-4847.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

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Mylinh Tran

Art Unit: 2179

Art Unit 2179

/TuyetLien T Tran/

Examiner, Art Unit 2179